#### REMARKS

Claims 1-18 and 29-41 are currently pending. All claims stand rejected. Claims 1-18, 32-38, and 40-41 have been canceled. Claim 42 is hereby added. The amendments are fully supported by the specification generally, and specifically in Fig. 16. No new matter has been added.

The specification has been amended both to correct the length of the abstract and two identify the sequence listing identifiers. The outstanding objections are now moot.

The claim objections are now moot in light of the instant amendments.

# 35 USC §112, second paragraph

The outstanding rejection under section 112, second paragraph is now moot in view of the instant amendments

## 35 USC §112, first paragraph

Claims 1-5, 7, 8 and 39-41 stand rejected under section 112, first paragraph, for failing to comply with the written description requirement. Applications traverse.

The rejection is now moot in view of the instant amendments. With respect to claim 39, Applicants submit that the claim requires the elements of c5-12 (SEQ ID NO.5) and at least one "cis-acting regulatory element comprising SRE (SEQ ID NO.1); MEF-1 (SEQ ID NO.2); MEF-2 (SEQ ID NO.3); or TEF-1 (SEQ ID NO.4)." Such a claimed invention is supported by the instant specification, in particular Fig. 16. In that figure both SEQ ID NO.5 is depicted and the cis-acting regulatory elements are shown within SEQ ID NO.5. This disclosure supports the claimed invention.

Accordingly, the rejection under section 112, first paragraph should be withdrawn.

### 35 USC §102

Claims 1-4 and 7 stand rejected under section 102(b) as being anticipated by Schwartz et al (US 5,298,422). Applicants traverse.

Firstly, the Patent Office has failed to meet its burden to show that all elements of the claimed invention have been anticipated by the cited reference, Schwartz et al. Instead, the Patent Office misapplies case law to suggest that the burden is upon the Applicant to prove novelty. The citation of *In re Best* to suggest that the burden is upon the Applicant is incorrect. Actually, In re Best addresses an inherent teaching in the prior art and only shifts the burden of proof to the applicant when "the Patent Office has **reason to believe that a functional limitation** asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on" See Page 1254-1255 (citing In re Swinchart, 58 CCPA 1027, 1031, 439 F.2d 210, 212-13, 169 USPQ 226, 229) (emphasis added). In this instance, the Patent Office is attempting to inappropriately use case law related to an inherent anticipation to support an anticipation rejection not based on inherency.

Notwithstanding the improper use of *In re Best*, Applicants submit that Schwartz et al fails to disclose each an every element of the claimed invention. In particular, Schwartz et al. fails to disclose a sequence similar to that of SEQ ID NO.5 – not even a sequence of 300 nucleotides or greater.

Accordingly, the rejection under §102 should be withdrawn.

### 35 USC \$103

Claims 1-5, 7 and 8 stand rejected under section 103(a) as being unpatentable over Draghia-Akli et al. (US 7,241,744). Applicants traverse.

Errantly, the Patent Office has purported that SEQ ID NO.1 in Draghia-Akli to be a promoter; however, SEQ ID NO.1 is a protein sequence that is identified as a GHRH analog. For the sake of progressing prosecution, Applicants submit that the Patent Office might have had

in mind SEQ ID NO.7 in Draghia-Akli, which is a nucleotide sequence identified as a eukaryotic

promoter c5-12. This sequence fails to render obvious the claimed invention related to instant

SEQ ID NO.5. The sequence lengths are substantially different (323 nucleotides in Draghia-Akli

and 335 in instant application). Furthermore, the alignment between the two sequences results in

96.1% similarity. Attachment 1 is provided to show the alignment performed at

http://www.ebi.ac.uk/Tools/emboss/align/.

Accordingly, the differences are such that the teachings of Draghia-Akli would not have rendered the instant invention related to SEO ID NO.5 obvious. The rejection should be

withdrawn.

In conclusion, Applicants submit that the pending claims are in condition for allowance.

Applicants respectfully request an early indication of same. The Patent Office is invited to

contact the undersigned representative should that help to move the instant case to allowance.

Respectfully Submitted,

/Thomas S. Kim/

Thomas S. Kim Registration No. 51,009

Dated: March 31, 2009

VGX Pharmaceuticals, Inc. 450 Sentry Parkway Blue Bell, PA 19422

Telephone: 267-440-4203 Facsimile: 267-440-4242

7

\*



General Help Formats Gaps Matrix References

EMBOSS-Align Help

All Databases	Enter Text Here				Cir Reset () Give us Advanced Search Teedback	
EBI Groups	Training	Industry	About Us	Help	statute: 🖫 🖨	
EMBOSS Alig	n Results					
		N	leedle Results		MARKET WAS ARRESTED AND ARREST AND A STATE OF A STATE O	
Matrix Blosum62			um62			
Open gap penalty 10.0						
Sap extension penalty			0.5			
leedle output	needle-20090401-0310494607.output					
SUBMIT ANOTHE	0.100	- ver				

```
Program: needle
  Rundate: Wed Apr 01 03:10:50 2009
Align_format: srspair
# Report_file: /ebi/extserv/old-work/needle-20090401-0310494607.output
*************************
# Aligned sequences: 2
# 1: SEQ
# 2: SEQ
# Matrix: EBLOSUM62
# Gap_penalty: 10.0
# Extend penalty: 0.5
# Length: 335
# Identity:
             322/335 (96.1%)
# Similarity:
             322/335 (96.1%)
# Gaps:
              12/335 ( 3.6%)
# Score: 2030.0
SEQ
               1 cggccgtccgccttcggcaccatcctcacgacacccaaatatqqcqacqq
                                                              50
                 SEC
               1 cggccgtccgccctcggcaccatcctcacgacacccaaatatggcgacgg
                                                             50
SEO
              51 qtqaqqaatqqtggggagttatttttaqagcggtgaggaaggtgggcagg
                                                             100
                 SEO
                                                             100
              51 gtgaggaatggtggggagttatttttagagcggtgaggaaggtgggcagg
SEO
              101 cagcaggtgttggcgctctaaaaataactcccgggagttatttttagagc
                                                             150
                 nistininiirimmuummatiirimmuudis
SEO
              101 cagcaggtqttqqcqctctaaaaataactcccqqqaqttatttttagagc
                                                             150
SEO
                                                            200
              151 ggaggaatggtggacacccaaatatggcgacggttcctcacccgtcgcca
                 SEO
              151 ggaggaatggtggacacccaaatatggcgacggttcctcacccgtcgcca
                                                             200
SEO
              201 tatttgggtgtccgcctcggccggggccgcattcctgggggccgggcg
                                                            250
                 SEO
              201 tatttgggtgtccgcctcggccggggccgcattcctgggggccgggcgg
SEO
              251 tgctcccgccccgctcqataaaaqgctccqqqgccqqcqqcqqcccacga
                 SEO
              251 tgctcccgcccgcctcqataaaaggctccqqqqccgqccgqcgcccacqa
                                                            300
SEO
              301 gctacccggaggagcgggaggcgccaagctctaga
                                                335
                 immeliniiniiliiniini
SEO
              301 gctacccggaggagggggggggg
                                                323
```